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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/706.112 11/03/00 SWARTZ J 04873-031003 **EXAMINER** MMC1/0618 G ROGER LEE FUREMAN. J FISH & RICHARDSON ART UNIT PAPER NUMBER 225 FRANKLIN STREET BOSTON MA 02110 2876 **DATE MAILED:** 06/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

+	•	Application No.	licant(s)
/	Office Action Summary	09/706,112	SWARTZ, JEROME
	•	Examiner	Art Unit
:		Jared J. Fureman	2876
Period fo	- The MAILING DATE of this communicat or Reply	tion appears on the cover sheet wi	th the correspondence address
THE I - Externance - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA assions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) of period for reply is specified above, the maximum statute to reply within the set or extended period for reply will eply received by the Office later than three months after add patent term adjustment. See 37 CFR 1.704(b).	ATION.  37 CFR 1.136 (a). In no event, however, may a ication.  lays, a reply within the statutory minimum of thi ory period will apply and will expire SIX (6) MOI.  I. by statute, cause the application to become A	reply be timely filed  ty (30) days will be considered timely.  THS from the mailing date of this communication.
1)□	Responsive to communication(s) filed	l on	
2a)□		)⊠ This action is non-final.	a territorio de la composición de la c La composición de la
3)	Since this application is in condition for closed in accordance with the practice	or allowance except for formal ma	tters, prosecution as to the merits is
Dispositi	on of Claims		
4)⊠	Claim(s) 20-25 is/are pending in the a	pplication.	
	4a) Of the above claim(s) is/are	withdrawn from consideration.	
_	Claim(s) is/are allowed.		
6)⊠	Claim(s) 20-25 is/are rejected.		
7) 🗌	Claim(s) is/are objected to.		
8)[	Claims are subject to restriction	n and/or election requirement.	
Application	on Papers		
9)[	The specification is objected to by the E	Examiner.	
10)	The drawing(s) filed on is/are ob	jected to by the Examiner.	
11)⊠	The proposed drawing correction filed o	on <u>03 <i>November 2000</i> is:</u> a)⊠ a <sub>l</sub>	pproved b) disapproved.
12)	The oath or declaration is objected to b	y the Examiner.	
Priority u	nder 35 U.S.C. § 119		
13) 🗌	Acknowledgment is made of a claim for	r foreign priority under 35 U.S.C.	§ 119(a)-(d) or (f).
	☐All b)☐ Some * c)☐ None of:		
	1.☐ Certified copies of the priority do	cuments have been received.	
:	2. Certified copies of the priority do		pplication No.
	3. ☐ Copies of the certified copies of t	he priority documents have been onal Bureau (PCT Rule 17,2(a)).	received in this National Stage
	Acknowledgement is made of a claim fo		
Attachment(	s)		
6) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTC nation Disclosure Statement(s) (PTO-1449) Pape	0-948) 19) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)
Patent and Tra O-326 (Rev		Office Action Summary	Part of Paper No. 5

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## **DETAILED ACTION**

Receipt is acknowledged of the preliminary amendment filed on 11/3/2000, and the IDS filed on 2/5/2001, which have been entered in the file. Claims 20-25 are pending. It is acknowledged that this application is a CON of 09/176,064, filed on 10/20/1998, which is a CON of 08/037,749, filed on 3/26/1993, now U.S. Pat. 5,825,402. Both parent applications, including the art cited therein, have been reviewed.

## **Drawings**

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 11/3/2000 have been approved by the examiner.

## Claim Objections

1. Claim 22 is objected to because of the following informalities: In line 1, "in" should be replaced with --is--. Appropriate correction is required.

# Claim Rejections - 35 USC § 103

2. Claims 20, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi, deceased (US 5,057,943, cited by applicant) in view of Christopher et al (US 5,227,617, cited by applicant).

Re claims 20 and 23-25: Takahashi teaches an apparatus for writing optical indicia on a medium 1. The apparatus includes: a central processing unit (CPU) (A/0 controller 6) for controlling the apparatus, a light source (laser 2) for generating a light beam (laser beam) suited for writing the optical indicia on the medium, a scanning element (A/0 modulator 5 and polygon mirror 70) under control of the CPU that directs

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the light beam at the medium in a pattern prescribed by the CPU, the light beam (laser beam) is pulsed by the A/0 modulator 5 (see figures 1, 4, column 1 lines 6-12, column 2 lines 43-66, and column 3 line 22 - column 4 line 9).

Takahashi fails to teach a housing configured to be hand held, and an interface for connecting the apparatus to external devices.

Christopher et al teaches a hand held apparatus 10 for writing optical indicia on a medium. The apparatus includes: a housing (handle 20 and housing 22) configured to be hand held, and an interface 122 for connecting the apparatus to external devices (see figures 1, 2, 4, column 3 line 60 - column 4 line 29, column 5 lines 51-57, and column 6 lines 49-54).

In view of Christopher et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate, with the apparatus as taught by Takahashi, a housing configured to be hand held, and an interface for connecting the apparatus to external devices, in order to provide a portable hand held apparatus which can be easily carried to a desired location of use, thereby increasing the versatility of the apparatus, and in order to provide the ability to communicate with an external device, such as a host computer, thereby increasing the data storage/processing capabilities of the apparatus.

Re claim 21: Takahashi as modified by Christopher et al fails to specifically teach the optical indicia being alphanumeric characters.

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However, Official Notice is taken that at the time of the invention it was well known to those of ordinary skill in the art to write optical indicia comprising alphanumeric characters on a medium.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to integrate, with the apparatus as taught by Takahashi as modified by Christopher et al, the optical indicia including alphanumeric characters, in order to provide human readable indicia on the medium, which would simplify organization/record keeping, since the medium would not require machine reading to be identified.

3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi as modified by Christopher as applied to claim 20 above, and further in view of Miyagawa (US 5,488,489, cited by applicant).

Takahashi also teaches the medium 1 being photosensitive (see column 3, lines 31-34).

Takahashi as modified by Christopher et al fails to teach the medium being thermal sensitive.

Miyagawa teaches that a thermal sensitive medium is an art recognized functional equivalent of a photosensitive medium (see column 8, lines 24-28).

In view of Miyagawa's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to replace the photosensitive medium, as taught by Takahashi as modified by Christopher et al, with a thermal sensitive medium, since they are art recognized functional equivalents.

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## **Double Patenting**

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 20-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 5,825,402 (hereinafter the '402 patent) in view of Takahashi, deceased (US 5,057,943, cited by applicant) and Christopher et al (US 5,227,617, cited by applicant).

Re claims 20 and 22-25: The '402 patent claims a system for writing optical indicia (bar code symbols) on a medium, the system comprising: a light source for generating a light beam suited for writing the optical indicia on the medium, a scanning element (writing means) that directs the light beam at the medium in a prescribed pattern, the light source is a laser (laser diode), the light beam is a pulsed laser beam, the medium is thermal sensitive (heat sensitive) (see claims 1-3 and 5).

The '402 patent fails to specifically claim a central processing unit (CPU) for controlling the apparatus, a scanning element under control of the CPU that directs the

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light beam at the medium in a pattern prescribed by the CPU, the scanning element comprises a scanning mirror.

Takahashi teaches an apparatus for writing optical indicia on a medium 1. The apparatus includes: a central processing unit (CPU) (A/0 controller 6) for controlling the apparatus, a light source (laser 2) for generating a light beam (laser beam) suited for writing the optical indicia on the medium, a scanning element (A/0 modulator 5 and polygon mirror 70) under control of the CPU that directs the light beam at the medium in a pattern prescribed by the CPU, the light beam (laser beam) is pulsed by the A/0 modulator 5 (see figures 1, 4, column 1 lines 6-12, column 2 lines 43-66, and column 3 line 22 - column 4 line 9).

In view of Takahashi's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention, as claimed by the '402 patent, to include: a central processing unit (CPU) for controlling the apparatus, a scanning element under control of the CPU that directs the light beam at the medium in a pattern prescribed by the CPU, the scanning element comprises a scanning mirror, in order to increase the functionality/programmability of the apparatus, by using a CPU to control the apparatus.

The '402 patent as modified by Takahashi fails to claim a housing configured to be hand held, and an interface for connecting the apparatus to external devices.

Christopher et al teaches a hand held apparatus 10 for writing optical indicia on a medium. The apparatus includes: a housing (handle 20 and housing 22) configured to be hand held, and an interface 122 for connecting the apparatus to external devices

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(see figures 1, 2, 4, column 3 line 60 - column 4 line 29, column 5 lines 51-57, and column 6 lines 49-54).

In view of Christopher et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention, as claimed in the '402 patent as modified by Takahashi, to include: a housing configured to be hand held, and an interface for connecting the apparatus to external devices, in order to provide a portable hand held apparatus which can be easily carried to a desired location of use, thereby increasing the versatility of the apparatus, and in order to provide the ability to communicate with an external device, such as a host computer, thereby increasing the data storage/processing capabilities of the apparatus.

Re claim 21: The '402 patent as modified by Takahashi and Christopher et al fails to specifically claim the optical indicia being alphanumeric characters.

However, Official Notice is taken that at the time of the invention it was well known to those of ordinary skill in the art to include alphanumeric characters with bar code data symbols.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention, as claimed in the '402 patent as modified by Takahashi and Christopher et al, to include: the optical indicia including alphanumeric characters, in order to provide human readable indicia on the medium for use in the event that the bar code symbol is unreadable.

6. Claims 20-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 5 of

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copending Application No. 09/176,064 (hereinafter the '064 application) in view of Takahashi, deceased (US 5,057,943, cited by applicant) and Christopher et al (US 5,227,617, cited by applicant).

Re claims 20, 22, and 23-25: The '064 application claims a system for writing optical indicia on a medium, the system comprising: a light source for generating a light beam suited for writing the optical indicia on the medium, a scanning element (writing means) that directs the light beam at the medium in a prescribed pattern, the light source is a laser (laser diode), the light beam is a pulsed laser beam, the medium is thermal sensitive (heat sensitive) (see claims 1-3 and 5).

The '064 application fails to specifically claim a central processing unit (CPU) for controlling the apparatus, a scanning element under control of the CPU that directs the light beam at the medium in a pattern prescribed by the CPU, the scanning element comprises a scanning mirror.

Takahashi teaches an apparatus for writing optical indicia on a medium 1. The apparatus includes: a central processing unit (CPU) (A/0 controller 6) for controlling the apparatus, a light source (laser 2) for generating a light beam (laser beam) suited for writing the optical indicia on the medium, a scanning element (A/0 modulator 5 and polygon mirror 70) under control of the CPU that directs the light beam at the medium in a pattern prescribed by the CPU, the light beam (laser beam) is pulsed by the A/0 modulator 5 (see figures 1, 4, column 1 lines 6-12, column 2 lines 43-66, and column 3 line 22 - column 4 line 9).

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In view of Takahashi's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention, as claimed by the '064 application, to include: a central processing unit (CPU) for controlling the apparatus, a scanning element under control of the CPU that directs the light beam at the medium in a pattern prescribed by the CPU, the scanning element comprises a scanning mirror, in order to increase the functionality/programmability of the apparatus, by using a CPU to control the apparatus.

The '064 application as modified by Takahashi fails to claim a housing configured to be hand held, and an interface for connecting the apparatus to external devices.

Christopher et al teaches a hand held apparatus 10 for writing optical indicia on a medium. The apparatus includes: a housing (handle 20 and housing 22) configured to be hand held, and an interface 122 for connecting the apparatus to external devices (see figures 1, 2, 4, column 3 line 60 - column 4 line 29, column 5 lines 51-57, and column 6 lines 49-54).

In view of Christopher et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention, as claimed in the '064 application as modified by Takahashi, to include: a housing configured to be hand held, and an interface for connecting the apparatus to external devices, in order to provide a portable hand held apparatus which can be easily carried to a desired location of use, thereby increasing the versatility of the apparatus, and in order to provide the ability to communicate with an external device, such as a host computer, thereby increasing the data storage/processing capabilities of the apparatus.

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Re claim 21: The '064 application as modified by Takahashi and Christopher et al fails to specifically claim the optical indicia being alphanumeric characters.

However, Official Notice is taken that at the time of the invention it was well known to those of ordinary skill in the art to write optical indicia comprising alphanumeric characters on a medium.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention, as claimed in the '064 application as modified by Takahashi and Christopher et al, to include: the optical indicia including alphanumeric characters, in order to provide human readable indicia on the medium, which would simplify organization/record keeping, since the medium would not require machine reading to be identified.

This is a <u>provisional</u> obviousness-type double patenting rejection.

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stanly et al (US 4,429,369), Feinleib (US 4,421,406), and Silverberg (US 4,103,995) all teach apparatus for writing optical indicia on a medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703) 305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-F, first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*¶∱o* jjf June 12, 2001

MICHAEL G. LEE

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800